Biochemical Genetics, Vol. 13, Nos. 11/12, 1975

Author Index to Volume 13

Anderson, D. E., 501
Anderson, J. E., 189
Anyaibe, S. I. O., 673
Arnold, C. J., 699
Atkin, N. B., 301
Atkins, R., 411
Aversa, N. O., 813

Baker, J., 393
Bender, K., 369
Berger, E., 175
Black, J. A., 331, 341
Bloom, A. D., 471
Blum, E., 615
Bray, R. P., 643
Bresnick, E., 417
Brimhall, B., 411
Browder, L. W., 663
Bürki, K., 417
Busbee, D. L., 501
Byrne, O. R., 527
Byther, R., 557

Cantrell, E. T., 501
Chapman, V. M., 849
Chen, K., 771
Chern, C. J., 331, 341
Chuang, K.-C., 651
Coomes, M. L., 501
Craig, I., 867
Cullis, C. A., 687

De Falco, A., 615
den Bieman, M. G. C. W., 19
Denoya, C. D., 813
DeSimone, J., 783
Dessauer, H. C., 651
Deutsch, H. F., 643
Duke, E. J., 53
D'Urso, M., 615

Engel, W., 45, 301

Feldman, R. I., 227
Fisher, R. A., 857
Floderus, Y., 733

Gaitskhoki, V. S., 533
Garver, F. A., 743
Germershausen, J., 283
Giblett, E. R., 189
Glassman, E., 53
Gooder, H., 125
Gray, J. C., 771
Grell, E. H., 353
Grieshaber, C. K., 447
Gross, S. R., 567
Grover, N. S., 527
Gulumian, M., 255

Haley, L. E., 7, 435, 457
Halsall, D. M., 109
Harris, H., 857
Hawes, N. L., 519
Headings, V. E., 673
Hjorth, J. P., 379
Hoffman, H. A., 447
Hosty, T. S., 411
Howells, A. J., 273

© 1975 Plenum Publishing Corporation, 227 West 17th Street, New York, N.Y. 10011. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, microfilming, recording, or otherwise, without written permission of the publisher.

Ingle, J., 629

Jacobson, K. B., 353
Jobbágy, A. J., 813
Johnson, G. B., 833
Johnston, P. G., 235
Jones, R. T., 411

Kisselev, O. I., 533
Kit, G., 213
Kit, S., 213
Klebe, R. J., 805
Kleve, L. J., 783
Klose, J., 707
Kolodynska, K., 687
Korochkin, L. I., 65
Kung, S. D., 771

Lehrner, L. M., 145
Leibenguth, F., 263
Levin, D. A., 487
LeVine, J. P., 435
Levy, M., 487
Liebelt, A. G., 417
Lipps, L. S., 585
Lockridge, O., 471
Longshore, M. A., 567
Luckmann, W. H., 885
Lundin, L.-G., 733
Lush, I. E., 699
Lynes, M. A., 511

Malacinski, G. M., 145
Meltzer, P. S., 85
Meyerhof, P. G., 7, 457
Miller, S., 175
Mitchell, H. K., 85, 585
Moshkov, K. A., 533
Muijsson, I. E., 501

Narang, N., 73
Narang, S., 73
Neifakh, S. A., 533
Nevo, E., 651
Nichols, E. A., 323, 551

Ott, L. A., 759

Pangburn, S., 567
Pasteur, N., 789
Pearcy, R. W., 175
Petras, M. L., 551
Pisacane, A., 615
Potvin, B., 125
Poznakhirkina, N. A., 65
Puchkova, L. V., 533
Puckett, L. D., 1

Rittenberg, M. B., 331, 341
Roderick, T. H., 519
Rogers, P. A., 857
Romeo, G., 615
Rothschild, H., 283
Ruddle, F. H., 323, 551
Ruffilli, A., 615
Rushing, D. R., 53
Ryall, R. L., 273

Sanders, B. G., 779
Scandalios, J. G., 759
Scharloo, W., 721
Schmidtke, J., 45, 301
Schneider, R. G., 411
Schollen, J., 369
Schoone, A. A., 721
Schultz, G. A., 663
Sell, D. K., 885
Seller, J. P., 635
Serov, O. L., 65
Seybold, W. D., 85
Seyedyazdani, R., 247, 733
Shaeffer, J. R., 783
Sharman, G. B., 235
Shavlovski, M. M., 533
Shulman, V. S., 533
Sinègre, G., 789
Singh, M., 357
Smith, J. M., 393
Snyder, L. A., 1
Soares, E. R., 519
Sorenson, J. C., 759
Spector, E. B., 471
Speilmann, H., 707
Standerfer, R. J., 341
Steiner, E. E., 487
Steiner, G. W., 557
Strobeck, C., 393
Strobel, G. A., 557
Sullivan, D. T., 603
Sullivan, M. C., 603
Suskind, S. R., 283

Talmage, D. W., 743
Taylor, B. A., 511
Taylor, M. W., 227
Templeton, J. W., 341
Thörig, G. E. W., 721
Timmis, J. N., 629
Tobler, J. E., 29
Tolley, E., 867
Tomlin, G., 411
Travis, J. C., 779

Vacharlovski, V. G., 533
VandeBerg, J. L., 235
van Zutphen, L. F. M., 19
von Deimling, O., 369

Wakid, N. W., 255
Warner, C. K., 353
Whitt, G. S., 885
Widholm, J. M., 357
Wilcox, F. H., 243
Wildman, S. G., 771
Womack, J. E., 311, 511, 519

Biochemical Genetics, Vol. 13, Nos. 11/12, 1975

Subject Index to Volume 13

Activation, 85
Adenine auxotrophy, 227
Alcohol dehydrogenase, 435, 721
Aldehyde oxide, 53
Allelic regulation, 7
Allelic variation, 885
Allozyme genetics, 487
Allozymes, 175, 263
Amino acid incorporation, 635
α-Amylase, 145
Anemia, 341
Anthranilate, 357
Anthranilate synthetase, 357
Antigenicity, 743
Aryl hydrocarbon hydroxylase (AHH), 417
Aspartate aminotransferase, 457

Bacillus subtilis, 125
Benzimidazole nucleotide, 635
Blastocyst, 663

Canine, 331, 341
Carbamyl phosphate, 125
Carbonic anhydrase polymorphisms, 643
Carbonic anhydrase variants, 643
Cascade, 85
Catalase, 447
Cell size, 301
Ceruloplasmin, 533
Chicken, 145
Chicken–quail hybrid, 7, 435, 457
CHO cells, 227
Chromosomal proteins, 585
Chromosome, 511, 519, 849
Citrullinemia, 471
Cotransformation, 125
Cross-reactive material, 615
Culex pipiens pipiens, 789
Culex p. quinquefasciatus, 73

Defective transport, 109
Densitometry, 805
Deoxycytidylate deaminase, 213
Developmental changes, 73
Differentiation, 663
Disc PAGE of deoxycytidylate deaminase, 213
Disease resistance, 557
Dosage compensation, 29
Drosophila melanogaster, 29, 53, 85, 175, 263, 273, 353, 603, 721

Ecology, 651
Electrophoresis, 189, 393, 833
Electrophoretic variant, 323, 551
Electrophoretically identical alleles, 721
Environmental induction, 687
Environmentally induced genetic changes, 629
Enzyme activation, 247, 457
Enzyme activities in conidia, 813
Enzyme activity during germination, 813
Enzyme complexes, 255
Enzyme expression, 867
Enzyme inhibition, 73
Enzyme polymorphism, 833
Enzyme variation, 721
Erythrocyte, 331, 341
Erythrocyte carbonic anhydrase isozymes, 643
Erythrocyte hypoxanthine-guanine phosphoribosyltransferase (HGPRT), 255

© 1975 Plenum Publishing Corporation, 227 West 17th Street, New York, N.Y. 10011. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, microfilming, recording, or otherwise, without written permission of the publisher.

Escherichia coli, 109
Esterase polymorphism, 789
Esterases, 19, 311, 369, 885
Estradiol, 501
Estriol, 501
Estrogen metabolism, 501
Evolution, 45, 301, 743
Eye color mutants, 603

Fabry's disease, 615
Feedback inhibition, 357
Flax, 687
Fraction I protein, 771
Fructose 1,6-diphosphatase, 457
Fumarate hydratase, 867

α-Galactosidase, 615
β-Galactosidase, 733
Gel isoelectric focusing, 73
Gene action, 45, 301, 447
Gene order, 813
Genes, 379
Genetic defect in protein synthesis, 533
Genetic expression, 247, 663
Genetic polymorphism, 393
Genetic variation, 699, 733
Genetics, 19, 145, 673
Gluconeogenesis, 457
Glucose 6-phosphate dehydrogenase (G6PD), 235
β-Glucoside of anthranilate, 357
Glutamate oxaloacetic transaminase (GOT), 759
Glutathione reductase, 323
Glycerol gradient centrifugation of deoxycytidylate deaminase, 213
α-Glycerophosphate dehydrogenase, 263
Glyoxysomes (gGOT), 759

Hb Mobile, 411
Heliothis zea, 885
Hemoglobin synthesis, 783
Hemoglobin variant, 411
Hemoglobinopathy, 783
Horse carbonic anhydrases, 643
House mouse, 733
Human, 331, 341
Human hexokinase isozymes, 857
Human lymphocyte lines, 471
3-Hydroxykynurenine, 273
Hydroxylase, 501

Immunohistochemistry, 65
Inborn error of metabolism, 615
Inbred mice, 447
Internal standards, 833
Intestine, 511
Intraspecific variation, 189
γ-Irradiation, 557
Isoelectric focusing, 255, 707
Isoenzymes, 301, 663, 707, 733
Isozyme patterns, 759
Isozymes, 7, 65, 145, 673, 687, 805, 833, 885

Kangaroo, 235
Kidney, 369
Kynurenine, 603

Lactate dehydrogenase (LDH), 7, 65, 663, 707
Lap-1, 511
Lesch–Nyhan syndrome, 255
Leucine arylaminopeptidase (LAP), 511
Linkage, 311, 369, 849
Linum usitatissimum, 629
Lysine, 109

Macaca nemestrina, 189, 673
Malate dehydrogenase, 73, 519
Male sterility, 771
Malic enzyme, 457
Malpighian tubules, 603
Mammalian cells, 867
β-Mannosidase activity, 247
Mapped, 323
Marsupial, 235
3-Methylcholanthrene (3MC), 417
Mice, 247, 417, 519, 551, 567, 707
Michaelis constant, 175
Mitochondria, 519, 759
Molecular properties, 733
Molybdenum, 53
Mouse intestine, 699
Multiple hemoglobins, 379
Mus musculus, 311, 323, 369, 511, 849
Mus musculus molossinus, 311
Mutagenicity, 635
Mutant allele, 567
Mutants, 109
Mutation, 227

Neurospora crassa, 283, 813
Neutral mutation, 393

Nicotiana, 771
Nongenetic isozyme, 145
Nonhistone proteins, 585
Nuclei, 585
Nucleotide incorporation, 635

Oenothera, 487
Ontogenic expression, 29
Ontogeny, 435
Organophosphate sensitivity, 789

Pancreas, 145
Paternal X inactivation, 235
Phenol oxidase, 85, 353
6-Phosphogluconate dehydrogenase (PGD), 849
Phosphoribosylpyrophosphate (PRPP) amidotransferase, 227
Phosphorylase kinase (*Phk*), 567
Plant DNA, 629
Polyacrylamide gel, 567
Polyacrylamide gel electrophoresis, 73
Polymorphisms, 651
Polypeptide chain, 379
Polyploidy, 45, 301
Populations, 175
Primate carbonic anhydrases, 673
Primate hemoglobins, 743
Proteins, 651
Puffs, chromosome, 585
Purine biosynthesis, 227
Pyrimidine, 125
Pyruvate kinase, 331, 341

Quantitative methods, 805

Rabbit, 19
Rat ova, 65
Red cell enzymes, 189
Regulation, 125
Reticulocyte, 783
Ribosomal RNA gene redundancy, 629
Ribosomes, 283
Ribulose diphosphate carboxylase, 771

Salivary glands, 585
Scarlet mutant, 273
Selection, 651
Serum albumin, 551
Sickle cell trait, 783
Silene maritima, 393
Somatic cell hybrids, 867
  chick–mouse, 213
  human–mouse, 213
  monkey–mouse, 213
Specific enzyme activity, 447
Speck, 353
Starch gel electrophoresis, 7, 857
Structure, 145
Sugarcane mutants, 557
Suppression, 353

Testosterone-dependent kidney esterase, 369
α-Thalassemia, 783
Thermostability, 73
Thymidine kinase, 213
Thyroxine, 673
Tissue differences, 733
Tissue explants, 417
Toads, 651
Tobacco, 771
Toxin-binding protein, 557
Transformation, 29
Transition, G→A, 635
Translocation heterozygosity, 487
Transport mutants, 603
Trypsin, 699
Tryptophan biosynthesis, 357
Tryptophan oxygenase, 29

Urea cycle, 471

Wilson's disease, 533

Xanthine dehydrogenase, 53
Xanthine oxidase, 699
Xanthurenic acid, 273
X-linked mutation in man, 615

Zea mays L., 357, 759
Zoarces viviparus, 379
Zone electrophoresis, 805

CONTENTS

Vol. 13, Nos. 1/2 **February 1975**

Inhibition of RNA Synthesis in *Drosophila* Embryos by Isoxanthopterin 1
L. D. Puckett and L. A. Snyder

Ontogeny of Lactate Dehydrogenase Isozymes in Chicken–Quail Hybrid Embryos 7
Peter G. Meyerhof and Leslie E. Haley

Serum Esterase Genetics in Rabbits. III. A Third Allele on the *Est-2* Locus 19
L. F. M. van Zutphen and M. G. C. W. den Bieman

Dosage Compensation and Ontogenic Expression of Suppressed and Transformed *Vermilion* Flies in *Drosophila* 29
J. E. Tobler

Gene Action in Fish of Tetraploid Origin. I. Cellular and Biochemical Parameters in Cyprinid Fish 45
Jörg Schmidtke and Wolfgang Engel

Nutritional Control of Xanthine Dehydrogenase. II. Effects on Xanthine Dehydrogenase and Aldehyde Oxidase of Culturing Wild-Type and Mutant *Drosophila* on Different Levels of Molybdenum 53
E. J. Duke, D. R. Rushing, and E. Glassman

A Study on Lactate Dehydrogenase Isozymes in Rat Ova 65
N. A. Poznakhirkina, O. L. Serov, and L. I. Korochkin

Malate Dehydrogenase of a Mosquito, *Culex p. quinquefasciatus:* Developmental Changes, Polymorphism, and Physicochemical Characterization 73
Sudhir Narang and Neelam Narang

Phenol Oxidase Activation in *Drosophila:* A Cascade of Reactions 85
William D. Seybold, Paul S. Meltzer, and Herschel K. Mitchell

Overproduction of Lysine by Mutant Strains of *Escherichia coli* with Defective Lysine Transport Systems 109
D. M. Halsall

Carbamyl Phosphate Synthesis in *Bacillus subtilis* 125
Barry Potvin and Harry Gooder

Biochemical Genetics of α-Amylase Isozymes of the Chicken Pancreas 145
L. M. Lehrner and G. M. Malacinski

Vol. 13, Nos. 3/4 **April 1975**

Polymorphism at the α-Glycerophosphate Dehydrogenase Locus in *Drosophila melanogaster*. I. Properties of Adult Allozymes 175
Stephen Miller, Robert W. Pearcy, and Edward Berger

Intraspecific Red Cell Enzyme Variation in the Pigtailed Macaque (*Macaca nemestrina*) 189
Jeanne E. Anderson and Eloise R. Giblett

Analyses of Deoxycytidylate Deaminase Molecular Forms in Human–Mouse and Monkey–Mouse Somatic Cell Hybrids 213
Saul Kit and Gordon Kit

Purine Mutants of Mammalian Cell Lines. II. Identification of a Phosphoribosylpyrophosphate Amidotransferase–Deficient Mutant of Chinese Hamster Lung Cells 227
Rhoda I. Feldman and Milton W. Taylor

Inheritance of Erythrocyte Glucose 6-Phosphate Dehydrogenase in the Red-Necked Wallaby, *Macropus rufogriseus* (Desmarest), Consistent with Paternal X Inactivation 235
P. G. Johnston, J. L. VandeBerg, and G. B. Sharman

†Simplified Procedure for Electrophoresis of the Major Urinary Protein Complex of *Mus musculus* 243
F. H. Wilcox

Genetic Expression of β-Mannosidase Activity in Different Tissues of Mice 247
Reza Seyedyazdani

Isolation of Four Components from Purified Human Erythrocyte Hypoxanthine-Guanine Phosphoribosyltransferase by Isoelectric Focusing 255
Mairam Gulumian and N. W. Wakid

Variants of α-Glycerophosphate Dehydrogenase in Diploids and Triploids of *Drosophila melanogaster* 263
F. Leibenguth

A Biochemical Study of the *Scarlet* Eye-Color Mutant of *Drosophila melanogaster* 273
A. J. Howells and Rosemary L. Ryall

†*NOTE*

Vol. 13, Nos. 5/6 **June 1975**

Biochemical Genetic Studies of Cycloheximide Resistance in *Neurospora crassa* 283
Henry Rothschild, John Germershausen, and Sigmund R. Suskind

Gene Action in Fish of Tetraploid Origin. II. Cellular and Biochemical Parameters in Clupeoid and Salmonoid Fish 301
J. Schmidtke, N. B. Atkin, and W. Engel

Esterase-6 (*Es-6*) in Laboratory Mice: Hormone-Influenced Expression and Linkage Relationship to Oligosyndactylism (*Os*), Esterase-1 (*Es-1*), and Esterase-2 (*Es-2*) in Chromosome 8 311
James E. Womack

Polymorphism and Linkage of Glutathione Reductase in *Mus musculus* 323
Elizabeth A. Nichols and Frank H. Ruddle

Canine Erythrocyte Pyruvate Kinase. I. Properties of the Normal Enzyme 331
John A. Black, Ching J. Chern, and Marvin B. Rittenberg

Canine Erythrocyte Pyruvate Kinase. II. Properties of the Abnormal Enzyme Associated with Hemolytic Anemia in the Basenji Dog 341
Robert J. Standerfer, Marvin B. Rittenberg, Ching J. Chern, Joe W. Templeton, and John A. Black

Mechanism of Suppression in *Drosophila*. III. Phenol Oxidase Activity and the *Speck* Locus 353
Cynthia K. Warner, E. H. Grell, and K. Bruce Jacobson

Study of a Corn (*Zea mays* L.) Mutant (*Blue Fluorescent-1*) Which Accumulates Anthranilic Acid and Its β-Glucoside 357
Mahendra Singh and J. M. Widholm

Esterase. XXI. *Es-9*, a Possibly New Polymorphic Esterase in *Mus musculus* Genetically Linked to *Es-2* 369
J. Schollen, K. Bender, and O. von Deimling

Molecular and Genetic Structure of Multiple Hemoglobins in the Eelpout, *Zoarces viviparus* L. 379
J. Peter Hjorth

Vol. 13, Nos. 7/8 **August 1975**

Genetic Polymorphism in the Bladder Campion, *Silene maritima* 393
J. Baker, J. Maynard Smith, and C. Strobeck

Hb Mobile [$\alpha_2\beta_2$ 73(E17)Asp→Val]: A New Variant 411
Rose G. Schneider, Thomas S. Hosty, Gary Tomlin, Ruby Atkins, Bernadine Brimhall, and Richard T. Jones

Simple vs. Complex Inheritance of Inducible Aryl Hydrocarbon Hydroxylase in Mouse Tissues 417
Kurt Bürki, A. G. Liebelt, and Edward Bresnick

Gene Activation of Alcohol Dehydrogenase in Japanese Quail and Chicken–Quail Hybrid Embryos 435
J. P. LeVine and L. E. Haley

Genetic Regulation of the Expression of Catalase Activity in Murine Red Blood Cells 447
C. K. Grieshaber and H. A. Hoffman

Initial Expression of the Genes for Fructose 1,6-Diphosphatase, Malic Enzyme, and Aspartate Aminotransferase in Japanese Quail and Chicken–Quail Hybrid Embryos 457
Peter G. Meyerhof and Leslie E. Haley

Citrulline Metabolism in Normal and Citrullinemic Human Lymphocyte Lines 471
Elaine B. Spector, Oksana Lockridge, and Arthur D. Bloom

Allozyme Genetics in Permanent Translocation Heterozygotes of the *Oenothera biennis* Complex 487
Morris Levy, Erich E. Steiner, and Donald A. Levin

Induction of 16α-Hydroxylase in Cultured Human Lymphocytes 501
I. E. Muijsson, M. L. Coomes, E. T. Cantrell, D. E. Anderson, and D. L. Busbee

Vol. 13, Nos. 9/10 **October 1975**

Genetic Variation of an Intestinal Leucine Arylaminopeptidase (*Lap-1*) in the Mouse and Its Location on Chromosome 9 511
James E. Womack, Michael A. Lynes, and Benjamin A. Taylor

Mitochondrial Malate Dehydrogenase (*Mor-1*) in the Mouse: Linkage to Chromosome 5 Markers 519
James E. Womack, Norman L. Hawes, Eugene R. Soares, and Thomas H. Roderick

Genetic Control of Acid Phosphate Isozymes in *Arabidopsis thaliana* (L.) Heynh 527
N. S. Grover and O. R. Byrne

On the Defect of Synthesis of Ceruloplasmin in the Liver Polyribosomes in Wilson's Disease 533
V. S. Gaitskhoki, O. I. Kisselev, K. A. Moshkov, L. V. Puchkova, M. M. Shavlovski, V. S. Shulman, V. G. Vacharlovski, and S. A. Neifakh

Linkage of the Locus for Serum Albumin in the House Mouse, *Mus musculus* 551
Elizabeth A. Nichols, Frank H. Ruddle, and Michael L. Petras

Deficiency of Toxin-Binding Protein Activity in Mutants of Sugarcane Clone H54-775 as It Relates to Disease Resistance 557
Gary A. Strobel, Gary W. Steiner, and Ralph Byther

The Phosphorylase Kinase Deficiency (*Phk*) Locus in the Mouse: Evidence That the Mutant Allele Codes for an Enzyme with an Abnormal Structure 567
Stephen R. Gross, Margaret A. Longshore, and Sharon Pangburn

Rapidly Labeled Proteins on the Salivary Gland Chromosomes of *Drosophila melanogaster* 585
Herschel K. Mitchell and Loveriza S. Lipps

Transport Defects as the Physiological Basis for Eye Color Mutants of *Drosophila melanogaster* 603
David T. Sullivan and Marie C. Sullivan

Residual Activity of α-Galactosidase A in Fabry's Disease 615
Giovanni Romeo, Michele D'Urso, Alfredo Pisacane, Eric Blum, Antonio De Falco, and Anna Ruffilli

The Status of Ribosomal RNA Genes During Nuclear DNA Reversion in Flax 629
J. N. Timmis and J. Ingle

The Molecular Mechanism of Benzimidazole Mutagenicity: *In Vitro* Studies on Transcription and Translation 635
J. P. Seiler

Carbonic Anhydrase Isozymes in American Ponies and Riding Horses: A New Polymorphic High-Activity Type Isozyme 643
Harold F. Deutsch and Robert P. Bray

High Genetic Variability in an Ecologically Variable Vertebrate, *Bufo viridis* 651
Herbert C. Dessauer, Evaitar Nevo, Kuo-Chiian Chuang

Lactate Dehydrogenase in Preimplantation Rabbit Embryos 663
Gilbert A. Schulz and Leon W. Browder

Genetic Aspects of Quantitative Variation in the Carbonic Anhydrases of the Pig-Tailed Macaque, *Macaca nemestrina*. I. Response to Thyroxine 673
Stephen I. O. Anyaibe and Verle E. Headings

Variation in the Isozymes of Flax (*Linum usitatissimum*) Genotrophs 687
C. A. Cullis and K. Kolodynska

Two Factors Affecting the Heat Stability of Xanthine Oxidase in Extracts of Mouse Intestine 699
C. J. Arnold and I. E. Lush

Gel Isoelectric Focusing of Mouse Lactate Dehydrogenase: Heterogeneity of the Isoenzymes A_4 and X_4 707
Joachim Klose and Horst Speilmann

Variation Between Electrophoretically Identical Alleles at the Alcohol Dehydrogenase Locus in *Drosophila melanogaster* 721
G. E. W. Thörig, A. A. Schoone, and W. Scharloo

Molecular Nature of β-Galactosidase from Different Tissues in Two Strains of the House Mouse 733
Reza Seyedyazdani, Ylva Floderus, and Lars-G. Lundin

Vol. 13, Nos. 11/12 **December 1975**

Comparative Immunochemical Studies of Primate Hemoglobins 743
Fred A. Garver and David W. Talmage

Genetic Control and Intracellular Localization of Glutamate Oxaloacetic Transaminase in Maize 759
John G. Scandalios, John C. Sorenson, and Lila A. Ott

Polypeptide Composition of Fraction I Protein from *Nicotiana glauca* and from Cultivars of *Nicotiana tabacum*, Including a Male Sterile Line 771
K. Chen, S. D. Kung, J. C. Gray, and S. G. Wildman

†Evidence for One Immunoglobulin Light-Chain Type in Chickens: Absence of a Blocked *N*-Terminal Light-Chain Type 779
B. G. Sanders and J. C. Travis

Hemoglobin Synthesis Studies of a Family with α-Thalassemia Trait and Sickle Cell Trait 783
Joseph R. Shaeffer, Joseph DeSimone, and Lois J. Kleve

Esterase Polymorphism and Sensitivity to Dursban Organophosphorus Insecticide in *Culex pipiens pipiens* Populations 789
Nicole Pasteur and Gilbert Sinègre

A Simple Method for the Quantitation of Isozyme Patterns 805
Robert J. Klebe

Gene Topography and Function. I. Gene Expression in Germinating Conidia of *Neurospora crassa* 813
Andrés J. Jobbágy, Néstor O. Aversa, and Claudio D. Denoya

Use of Internal Standards in Electrophoretic Surveys of Enzyme Polymorphism 833
George B. Johnson

6-Phosphogluconate Dehydrogenase (PGD) Genetics in the Mouse: Linkage with Metabolically Related Enzyme Loci 849
Verne M. Chapman

An Electrophoretic Study of the Distribution and Properties of Human Hexokinases 857
Pauline A. Rogers, Rachel A. Fisher, and Harry Harris

Presence of Two Forms of Fumarase (Fumarate Hydratase E.C. 4.2.1.2) in Mammalian Cells: Immunological Characterization and Genetic Analysis in Somatic Cell Hybrids. Confirmation of the Assignment of a Gene Necessary for the Enzyme Expression to Human Chromosome 1 867
Elinor Tolley and Ian Craig

Esterase Polymorphism in the Corn Earworm, *Heliothis zea* (Boddie): A Survey of Temporal and Spatial Allelic Variation in Natural Populations 885
Douglas K. Sell, Gregory S. Whitt, and W. H. Luckmann

Author Index to Volume 13 899

Subject Index to Volume 13 903

†*NOTE*